

REMARKS

Claim 10 has been amended to recite Applicants' method of treating and caring for primary and secondary tumors is based on the application of a biomaterial comprised of a benzylester of hyaluronic acid or a cross linked derivative of hyaluronic acid which inhibits angiogenic processes related to vascularization to a tumor site. Support for this amendment can be found in the Specification on page 8, lines 17-26; the HACaT A5 Example, pages 6-7; and the HACaT II 4 Example, pages 7-8.

Claims 11 and 15 have been grammatically amended.

Claims 12-14 have been amended to depend from claim 11 instead of cancelled claim 2.

New independent claim 18 has been added along with new claims 19-21, which depend from claim 18. These claims are similar to claim 10 but recite that the benzyl ester of hyaluronic acid is at least 85%, 90%, 95% or 100% benzyl esterified. Support for these claims can be found in the Specification on page 8, lines 17-26; the HACaT A5 Example, pages 6-7; and the HACaT II 4 Example, pages 7-8.

New claims 23-30 have been added, and these claims are similar to claims 11-17, but depend from new claims 18 or 22-27, respectively. Note that claims 29 and 30 depend from claims 10 and 18, respectively, and recite the limitation of filling a cavity previously recited in claim 10.

The claims have been amended to more clearly describe the present invention.

No new matter has been introduced.

1. Claim Rejections under 35 USC §112, Second Paragraph

The Examiner has rejected claims 1-9 and 12-14 as allegedly indefinite for failure to recite a positive step (Office Action, page 2). Applicants respectfully traverse.

Applicants have cancelled claims 1-9 and amended claims 12-14 to depend from claim 11 rather than claim 2, thereby obviating the rejection.

The Examiner has rejected claims 15 and 17 as allegedly lacking proper antecedent basis regarding the “biomaterial” limitation (Office Action, page 2). Applicants respectfully traverse.

Applicants have amended claim 10, from which claims 15 and 17 depend, to recite the term “biomaterial,” thereby obviating the rejection.

2. Claim Rejections under 35 USC §101

The Examiner has rejected claims 1-9 and 12-14 under 35 USC §101 because the Examiner states these claims recite a use without setting forth any steps involved in the process (Office Action, page 2). Applicants respectfully traverse.

Applicants have cancelled claims 1-9 and amended claims 12-14 to depend from claim 11 rather than claim 2, thereby obviating the rejection.

3. Claim Rejections under 35 USC §103

The Examiner has rejected claims 10-11 and 15-17 as allegedly obvious over Pavesio et al. (U.S. Pat. No. 6,872,819). In imposing this rejection, the Examiner states Pavesio et al. disclose a method for regenerating mammalian tissue *in-vivo* comprising applying a biomaterial containing a benzyl ester of hyaluronic acid (hereinafter “HA benzyl ester”) to a tissue requiring regeneration (Office Action page 3). The Examiner states the difference between Applicants’ claimed method and the method disclosed by Pavesio et al. is that Pavesio et al. do not exemplify filling in a cavity resulting from the surgical removal of a tumor with an HA benzyl ester. The Examiner concludes that, based on the Pavesio et al. disclosure, it would have been obvious to a person of ordinary skill

in the art (POSITA) to treat a cavity resulting from the surgical removal of a tumor with an HA benzyl ester (Office Action, pages 4-5). Applicants respectfully traverse.

Applicants point out that an important novel and nonobvious aspect of the present invention is the inhibition of cancer cell proliferation via the suppression of angiogenic processes related to vascularization with the biomaterials of the present invention. Applicants have amended claim 10 to more clearly describe this aspect of the present invention. Pavesio et al., therefore, is not a proper reference for an obviousness rejection because it occupies a different field and solves a different problem than the present invention. In particular, Pavesio et al. address the promotion of tissue regeneration, whereas the present invention addresses the prevention of cancer cell proliferation by suppressing angiogenesis.

Applicants also point out that Pavesio et al. disclose promoting tissue regeneration, and it is well known in the art that angiogenesis is a required step for tissue regeneration in the vast majority of mammalian tissues. In contrast, Applicants' claimed method involves the inhibition of angiogenesis to prevent cancer cell proliferation. It follows that Pavesio et al. teach away from the present invention, and is therefore an improper reference upon which to base an obviousness rejection.

Applicants also point out that claim 10 is drawn not only to esterified benzyl esters of HA, but to cross linked derivatives of HA as well. Because the Pavesio et al. reference fails to disclose any cross linked derivatives of HA, it cannot support an obviousness rejection for this aspect of claim 10.


In view of the foregoing amendments and remarks, Applicants respectfully request withdrawal of the rejections and allowance of the claims, which are drawn to novel and nonobvious subject matter.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Leonard R. Svensson (Reg. No. 30,330) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
Leonard R. Svensson, #30,330

LRS/lmt
0471-0286PUS1

P.O. Box 747
Falls Church, VA 22040-0747
(714) 708-8555